IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)	
	)	
Inventor: Peter H. Redweik	)	Examiner: Jessica Lemieux
	)	
Serial #: 10/644,171	)	Group Art Unit: 3693
	)	
Filed: August 20, 2003	)	Appeal No.: _____
	)	
Title: FUTURE VALUE PROPENSITY FOR LIFE-TIME VALUE FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM DATABASE MANAGEMENT SYSTEM	)	

BRIEF OF APPELLANT

MAIL STOP APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR §41.37, Appellant's attorney hereby submits the Brief of Appellant on appeal from the final rejection in the above-identified application, as set forth in the Office Action dated August 13, 2009.

The Office is authorized to charge any necessary fees or credit any overpayments to Deposit Account No. 50-4370 of Teradata Corporation, the assignee of the present application.

I. REAL PARTY IN INTEREST

The real party in interest is Teradata Corporation, the assignee of the present application.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

III. STATUS OF CLAIMS

Claims 1, 3-9, 11-19, 21-27, 29-37, 39-45 and 47-54 are pending in the application.

Claims 2, 10, 20, 28, 38 and 46 have been canceled.

Claims 1, 3-5, 7-9, 11-17, 19-23, 25-35, 37, 39-41 and 43-53 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Johnson et al., U.S. Patent 7,082,411 (Johnson), Sandretto, U.S. Patent 5,812,988 (Sandretto), Kuhlemeyer, "Fundamentals of Financial Management" (Kuhlemeyer), and Keyes et al., U.S. Patent 7,447,652 (Keyes).

Claims 6, 24 and 42 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Johnson et al., U.S. Patent 7,082,411 (Johnson), Sandretto, U.S. Patent 5,812,988 (Sandretto), Kuhlemeyer, "Fundamentals of Financial Management" (Kuhlemeyer), Keyes et al., U.S. Patent 7,447,652 (Keyes), and Atkins, U.S. Patent 5,852,811 (Atkins).

Claims 18, 36 and 54 were indicated as being allowable if rewritten in independent form to include the base claim and any intervening claims.

Claims 1, 3-9, 11-17, 19, 21-27, 29-35, 37, 39-45 and 47-53 are being appealed.

IV. STATUS OF AMENDMENTS

No amendments have been submitted subsequent to the final Office Action dated August 13, 2009.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter can be found in the Appellant's specification as filed as shown below:

Claim Elements	**Support in Specification**
1. A method of performing financial processing, comprising:	Page 4, lines 16-23; Page 4, line 23 – page 6, line 13 referring to 100, 102, 104, 106, 108, 110, 112 in FIG. 1.
(a) selecting, in one or more computers, accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and	Page 4, line 25 – page 6, line 13 referring to 100, 102, 104, 106 in FIG. 1; and Page 7, lines 15-19 referring to 300 in FIG. 3.
(b) performing, in one or more computers, one or more Future Value (FV) calculations	Page 4, line 25 – page 6, line 13 referring to 100, 102, 104, 106 in FIG. 1; and

Claim Elements	Support in Specification
on the selected accounts by applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates, wherein the FV calculations determine a possible future profitability value of products that may be purchased in the future;	Page 7, line 29 – page 8, line 4 referring to 304 in FIG. 3.
(c) wherein the step of applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts; determining an initial propensity rate for the matched accounts; calculating a rate change for the matched account; calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period; performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period; and storing the FV amount; and	Page 25, line 1 – page 26, line 8 referring to 800, 802, 804, 806, 808, 810 in FIG. 8.
(d) wherein the FV propensity rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.

Claim Elements	Support in Specification
3. The method of claim 1, wherein the FV is a possible future profitability value.	Page 6, lines 18-24 referring to FIG. 2; and page 7, line 29 – page 8, line 4 referring to 306.
4. The method of claim 1, wherein the selected accounts contain current profitability values.	Page 6, line 15 – page 7, line 10 referring to 200, 204 in FIG. 2; and Page 7, lines 15-19 referring to 300 in FIG. 3.
5. The method of claim 4, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.	Page 6, line 15 – page 7, line 10 referring to 200, 204 in FIG. 2; Page 7, lines 15-19 referring to 300 in FIG. 3; and page 7, line 29 – page 8, line 4 referring to 306 in FIG. 3.
6. The method of claim 1, wherein the selected amounts are forecast amounts.	Page 7, lines 15-19 referring to 300 in FIG. 3.
7. The method of claim 1, wherein the selected rates are FV propensity rates.	Page 7, lines 15-19 referring to 300 in FIG. 3.
8. The method of claim 1, wherein a user specifies one or more forecast periods over which the FV calculations are performed.	Page 7, lines 20-22 referring to 302 in FIG. 3.
9. The method of claim 8, wherein a user specifies one or more rates for the forecast periods.	Page 7, lines 20-22 referring to 302 in FIG. 3.
11. The method of claim 1, wherein the FV propensity rule comprises a Constant (no compounding) method according to: $Amount_i = Amount_0 * (1 + R_0) * ((k - j + 1) /$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_0 = initial rate, i = forecast period, j = first month in a forecast period, and k = last month in a	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.

Claim Elements	Support in Specification
forecast period.	
12. The method of claim 1, wherein the FV propensity rule comprises a Constant (with compounding) method according to: $Amount_i = Amount_0 * (1 + R_m)^i * ((k - j + 1) /$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_m = monthly rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
13. The method of claim 1, wherein the FV propensity rule comprises an Additive (no compounding) method according to: $Amount_i = Amount_0 * (1 + i * (R_0 / 12)) * ((k$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_0 = initial rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
14. The method of claim 1, wherein the FV propensity rule comprises an Additive (with compounding) method according to: $Amount_i = Amount_0 * (1 + Compounded\_Rate$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, i = forecast period, j = first month in a forecast period, k = last month in a forecast period, and $Compounded\_Rate = Rate_1 * Rate_2 * ... * Rate_i$.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
15. The method of claim 1, wherein the FV	Page 26, line 10 – page 28, line 6 referring to

Claim Elements	Support in Specification
propensity rule comprises a Manual (no compounding) method according to: $Amount_i = Amount_0 * (1 + R_{man}) * ((k - j + 1)$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_{man} = manual rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	812 in FIG. 8.
16. The method of claim 1, wherein the FV propensity rule comprises a Manual (with compounding) method according to: $Amount_i = Amount_0 * (1 + Compounded\_Rate$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, i = forecast period, j = first month in a forecast period, k = last month in a forecast period, and $Compounded\_Rate = Rate_1 * Rate_2 * ... * Rate_i$.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
17. The method of claim 1, wherein the FV propensity rule comprises a Constant method according to: $Amount_i = Amount_0$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, and i = forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
19. A system for performing financial processing, comprising: one or more computers; logic, performed by the computers, for:	Page 4, lines 16-23; Page 4, line 23 – page 6, line 13 referring to 100, 102, 104, 106, 108, 110, 112 in FIG. 1.
(a) selecting accounts, amounts and rates from account data stored in a database using	Page 4, line 25 – page 6, line 13 referring to 100, 102, 104, 106 in FIG. 1; and

Claim Elements	Support in Specification
selection criteria specified by one or more rules; and	Page 7, lines 15-19 referring to 300 in FIG. 3.
(b) performing one or more Future Value (FV) calculations on the selected accounts by applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates, wherein the FV calculations determine a possible future profitability value of products that may be purchased in the future;	Page 4, line 25 – page 6, line 13 referring to 100, 102, 104, 106 in FIG. 1; and Page 7, line 29 – page 8, line 4 referring to 304 in FIG. 3.
(c) wherein the step of applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts; determining an initial propensity rate for the matched accounts; calculating a rate change for the matched account; calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period; performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period; and storing the FV amount; and	Page 25, line 1 – page 26, line 8 referring to 800, 802, 804, 806, 808, 810 in FIG. 8.
(d) wherein the FV propensity rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding),	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.

Claim Elements	Support in Specification
Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.	
21. The system of claim 19, wherein the FV is a possible future profitability value.	Page 6, lines 18-24 referring to FIG. 2; and page 7, line 29 – page 8, line 4 referring to 306.
22. The system of claim 19, wherein the selected accounts contain current profitability values.	Page 6, line 15 – page 7, line 10 referring to 200, 204 in FIG. 2; and Page 7, lines 15-19 referring to 300 in FIG. 3.
23. The system of claim 22, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.	Page 6, line 15 – page 7, line 10 referring to 200, 204 in FIG. 2; Page 7, lines 15-19 referring to 300 in FIG. 3; and page 7, line 29 – page 8, line 4 referring to 306 in FIG. 3.
24. The system of claim 19, wherein the selected amounts are forecast amounts.	Page 7, lines 15-19 referring to 300 in FIG. 3.
25. The system of claim 19, wherein the selected rates are FV propensity rates.	Page 7, lines 15-19 referring to 300 in FIG. 3.
26. The system of claim 19, wherein a user specifies one or more forecast periods over which the FV calculations are performed.	Page 7, lines 20-22 referring to 302 in FIG. 3.
27. The system of claim 26, wherein a user specifies one or more rates for the forecast periods.	Page 7, lines 20-22 referring to 302 in FIG. 3.
29. The system of claim 19, wherein the FV propensity rule comprises a Constant (no compounding) method according to: $Amount_i = Amount_0 * (1 + R_0) * ((k - j + 1) /$	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.

Claim Elements	Support in Specification
$Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_0 = initial rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	
30. The system of claim 19, wherein the FV propensity rule comprises a Constant (with compounding) method according to: $Amount_i = Amount_0 * (1 + R_m)^i * ((k - j + 1) /$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_m = monthly rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
31. The system of claim 19, wherein the FV propensity rule comprises an Additive (no compounding) method according to: $Amount_i = Amount_0 * (1 + i * (R_0 / 12)) * ((k$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_0 = initial rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
32. The system of claim 19, wherein the FV propensity rule comprises an Additive (with compounding) method according to: $Amount_i = Amount_0 * (1 + Compounded\_Rate$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, i = forecast period, j = first month in a forecast period, k =	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.

Claim Elements	Support in Specification
last month in a forecast period, and Compounded_Rate = $Rate_1$ * $Rate_2$ * ... * $Rate_i$.	
33. The system of claim 19, wherein the FV propensity rule comprises a Manual (no compounding) method according to: $Amount_i = Amount_0 * (1 + R_{man}) * ((k - j + 1)$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_{man} = manual rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
34. The system of claim 19, wherein the FV propensity rule comprises a Manual (with compounding) method according to: $Amount_i = Amount_0 * (1 + Compounded\_Rate$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, i = forecast period, j = first month in a forecast period, k = last month in a forecast period, and Compounded_Rate = $Rate_1$ * $Rate_2$ * ... * $Rate_i$.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
35. The system of claim 19, wherein the FV propensity rule comprises a Constant method according to: $Amount_i = Amount_0$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, and i = forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
37. An article of manufacture comprising a storage device for storing instructions that,	Page 4, lines 16-23; Page 4, line 23 – page 6, line 13 referring to

Claim Elements	Support in Specification
when read and executed by one or more computers, result in the computers performing a method of financial processing, comprising:	100, 102, 104, 106, 108, 110, 112 in FIG. 1.
(a) selecting, in one or more computers, accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and	Page 4, line 25 – page 6, line 13 referring to 100, 102, 104, 106 in FIG. 1; and Page 7, lines 15-19 referring to 300 in FIG. 3.
(b) performing, in one or more computers, one or more Future Value (FV) calculations on the selected accounts by applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates, wherein the FV calculations determine a possible future profitability value of products that may be purchased in the future;	Page 4, line 25 – page 6, line 13 referring to 100, 102, 104, 106 in FIG. 1; and Page 7, line 29 – page 8, line 4 referring to 304 in FIG. 3.
(c) wherein the step of applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts; determining an initial propensity rate for the matched accounts; calculating a rate change for the matched account; calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period; performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period; and storing the FV	Page 25, line 1 – page 26, line 8 referring to 800, 802, 804, 806, 808, 810 in FIG. 8.

Claim Elements	Support in Specification
amount; and	
(d) wherein the FV propensity rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
39. The article of claim 37, wherein the FV is a possible future profitability value.	Page 6, lines 18-24 referring to FIG. 2; and page 7, line 29 – page 8, line 4 referring to 306.
40. The article of claim 37, wherein the selected accounts contain current profitability values.	Page 6, line 15 – page 7, line 10 referring to 200, 204 in FIG. 2; and Page 7, lines 15-19 referring to 300 in FIG. 3.
41. The article of claim 40, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.	Page 6, line 15 – page 7, line 10 referring to 200, 204 in FIG. 2; Page 7, lines 15-19 referring to 300 in FIG. 3; and page 7, line 29 – page 8, line 4 referring to 306 in FIG. 3.
42. The article of claim 37, wherein the selected amounts are forecast amounts.	Page 7, lines 15-19 referring to 300 in FIG. 3.
43. The article of claim 37, wherein the selected rates are FV propensity rates.	Page 7, lines 15-19 referring to 300 in FIG. 3.
44. The article of claim 37, wherein a user specifies one or more forecast periods over which the FV calculations are performed.	Page 7, lines 20-22 referring to 302 in FIG. 3.
45. The article of claim 44, wherein a user specifies one or more rates for the forecast	Page 7, lines 20-22 referring to 302 in FIG. 3.

Claim Elements	Support in Specification
periods.	
47. The article of claim 37, wherein the FV propensity rule comprises a Constant (no compounding) method according to: $Amount_i = Amount_0 * (1 + R_0) * ((k - j + 1) /$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_0 = initial rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
48. The article of claim 37, wherein the FV propensity rule comprises a Constant (with compounding) method according to: $Amount_i = Amount_0 * (1 + R_m)^i * ((k - j + 1) /$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_m = monthly rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
49. The article of claim 37, wherein the FV propensity rule comprises an Additive (no compounding) method according to: $Amount_i = Amount_0 * (1 + i * (R_0 / 12)) * ((k$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_0 = initial rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
50. The article of claim 37, wherein the FV propensity rule comprises an Additive (with	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.

Claim Elements	Support in Specification
compounding) method according to: $Amount_i = Amount_0 * (1 + Compounded\_Rate$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, i = forecast period, j = first month in a forecast period, k = last month in a forecast period, and $Compounded\_Rate = Rate_1 * Rate_2 * ... * Rate_i$.	
51. The article of claim 37, wherein the FV propensity rule comprises a Manual (no compounding) method according to: $Amount_i = Amount_0 * (1 + R_{man}) * ((k - j + 1)$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, R_{man} = manual rate, i = forecast period, j = first month in a forecast period, and k = last month in a forecast period.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
52. The article of claim 37, wherein the FV propensity rule comprises a Manual (with compounding) method according to: $Amount_i = Amount_0 * (1 + Compounded\_Rate$ $Amount_i$ = calculated amount by forecast period, $Amount_0$ = initial amount, i = forecast period, j = first month in a forecast period, k = last month in a forecast period, and $Compounded\_Rate = Rate_1 * Rate_2 * ... * Rate_i$.	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.
53. The article of claim 37, wherein the FV propensity rule comprises a Constant method according to: $Amount_i = Amount_0$ $Amount_i$	Page 26, line 10 – page 28, line 6 referring to 812 in FIG. 8.

Claim Elements	Support in Specification
= calculated amount by forecast period, $Amount_0$ = initial amount, and i = forecast period.	

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1, 3-5, 7-9, 11-17, 19-23, 25-35, 37, 39-41 and 43-53 stand rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Johnson et al., U.S. Patent 7,082,411 (Johnson), Sandretto, U.S. Patent 5,812,988 (Sandretto), Kuhlemeyer, "Fundamentals of Financial Management" (Kuhlemeyer), and Keyes et al., U.S. Patent 7,447,652 (Keyes).

2. Claims 6, 24 and 42 stand rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Johnson et al., U.S. Patent 7,082,411 (Johnson), Sandretto, U.S. Patent 5,812,988 (Sandretto), Kuhlemeyer, "Fundamentals of Financial Management" (Kuhlemeyer), Keyes et al., U.S. Patent 7,447,652 (Keyes), and Atkins, U.S. Patent 5,852,811 (Atkins).

VII. ARGUMENT

A. Arguments directed to the first grounds for rejection: Claims 1, 3-5, 7-9, 11-17, 19-23, 25-35, 37, 39-41 and 43-53 stand rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Johnson et al., U.S. Patent 7,082,411 (Johnson), Sandretto, U.S. Patent 5,812,988 (Sandretto), Kuhlemeyer, "Fundamentals of Financial Management" (Kuhlemeyer), and Keyes et al., U.S. Patent 7,447,652 (Keyes).

1. Independent claims 1, 19 and 37

Appellant's attorney submits that the combination of references does not teach or suggest all of the various elements of Appellant's amended independent claims. Specifically, Appellant's claims recite novel and nonobvious computer-implemented financial processing, which include new variants of Future Value (FV) calculations.

Nonetheless, the Office Action asserts the following:

> 3. Claims 1, 3-5, 7-9, 11-17, 19-23, 25-35, 37, 39-41, and 43-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number

7,082,411 to Johnson et al (hereinafter Johnson) in view of US Patent Number 5,812,988 to Sandretto (hereinafter Sandretto) in view of the Fundamentals of Financial Management by Kuhlemeyer (hereinafter Kuhlemeyer) further in view of US Patent Number 7,447,652 to Keyes et al. (hereinafter Keyes).

As per claims 1, 19 and 37

Johnson discloses selecting accounts, amounts and rates (asset data) from account data stored in a database using selection criteria specified by one or more rules (column 4, lines 10-19) and performing one or more Future Value (FV) ($C_{,,}$ expected payoff) calculations on the selected accounts (column 9, lines 3-26 & 58-60) wherein the FV calculations determine a present value of an expected profitability value (score) of additional products that may be purchased (column 9, lines 3-26 & 58-60). Johnson further discloses propensity rules (risk) (column 9, lines 20-22 & column 16, lines 49-51). Johnson discloses matching the FV propensity rule against the selected accounts (column 4, lines 10-15 & column 9, lines 20-22) and using the FV propensity rule to calculate a FV amount from FV expected values (column 9, lines 3-26). Examiner notes that Johnson further discloses assessing asset and respective data using an iterative and adaptive process (column 4, lines 10-13).

Examiner notes that propensity is the probability that something is likely to happen, a risk measure. Johnson teaches risk. One skilled in the art at the time the invention was made would understand that propensity rules are rules that measure and determine risk is a rate used to discount or decrease future cash flow to obtain a net present value. Examiner also notes that the equation in the reference is a Future Value equation solving for Net Present Value (NPV). It would have further been obvious to one skilled in the art at the time the invention was made that this equation could easily be manipulated to solve for Future Value or any of the other variables in the equation. Examiner further notes that Johnson further discloses assessing asset and respective data using an iterative and adaptive process (column 4, lines 10-13).

Johnson does not specifically teach applying one or more FV propensity rules (risk) to the selected accounts using the selected amounts and rates. Johnson also does not specifically teach determining an initial propensity rate for the matched accounts, calculating a rate change for the matched account, calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period, performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period and storing the FV amount.

Sandretto teaches applying one or more FV propensity rules (risk) to the selected accounts using the selected amounts and rates (abstract & column 4, lines 13-16). Sandretto further discloses determining an initial propensity rate for the matched accounts (column 4, lines 40-55), calculating a rate change for the matched account (column 17, line 59 - column 18, line 1), calculating an effective propensity rate (column 9, lines 11-19) for each forecast period (column 10, lines 1-7) by applying the rate change to each initial propensity rate (column 4, lines 36-67 & column 10, lines 1-7) for each forecast period (column 10, lines 1-7) performing the FV propensity rule to calculate an FV amount from FV expected

values (abstract & column 4, lines 13-16) and the effective propensity rates (column 8, line 60 - column 9, line 19) for each forecast period (column 10, lines 1-7) and storing the FV amount (column 23, lines 25-26 and 60-61) and column 24, lines 17-23). Sandretto also teaches that the propensity rules can be used to determine an asset's discount rate (column 4, lines 13-16) and therefore the present value that Johnson discloses. Examiner notes that the reference teaches both storing projected returns as well as storing Net Present Value, the components of Future Value. It would have been obvious to one skilled in the art at the time the invention was made that storing of the components of Future Value could be used to easily determine the FV amount as FV is merely a calculation of the NPV in addition to returns.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to apply one or more FV propensity rules (risk) to the selected accounts using the selected amounts and rates and to determining an initial propensity rate for the matched accounts, calculating a rate change for the matched account, calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period, performing the FV propensity rule to calculate the effective propensity rates for each forecast period and storing the FV amount as taught by Sandretto as the propensity rules can be used to determine an asset's discount rate and therefore present value and to account for both the increases and decreases of value needed to more accurately estimate future value based upon the iterative and adaptive process disclosed by Johnson.

Johnson does not specifically teach applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules.

Sandretto teaches applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules (column 8, line 60 - column 9, line 19).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to apply propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules as taught by Sandretto to account for both the increases and decreases of value needed to more accurately estimate future value.

Johnson discloses calculating the time value of money (column 12, lines 34-36). Johnson and Sandretto does not specifically teach where the NPV forecast rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.

Kuhlemeyer teaches the NPV forecast rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.

Keys discloses selecting in one or more computers accounts, amounts and rates from account data and generating cash flow and net present value based on

received cash flow information, expenses and timings (Figures 6, 9 & 11). Keys also teaches providing different scenarios based on a variety of assumptions taking into account a variety of foreseeable risks (columns 2-3).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify Johnson and Sandretto to include the NPV forecast rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods as taught by Kuhlemeyer and Keys to allow for different calculations of the future value of present money.

Appellant's attorney notes that these assertions by the Office Action does not accurately reflect the sequence and context of Appellant's claim limitations, for example as shown in claim 1, which recites:

1. A method of performing financial processing, comprising:

(a) selecting, in one or more computers, accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and

(b) performing, in one or more computers, one or more Future Value (FV) calculations on the selected accounts by applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates, wherein the FV calculations determine a possible future profitability value of products that may be purchased in the future;

(c) wherein the step of applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts; determining an initial propensity rate for the matched accounts; calculating a rate change for the matched account; calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period; performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period; and storing the FV amount; and

(d) wherein the FV propensity rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.

Instead, the Office Action alters the sequence of limitations and takes certain limitations out of context, in order to apply the teachings of the references to the claim limitations.

a. Claim limitations directed to "(a) selecting, in one or more computers, accounts, amounts and rates from account data stored

in a database using selection criteria specified by one or more rules; and (b) performing, in one or more computers, one or more Future Value (FV) calculations on the selected accounts by applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates, wherein the FV calculations determine a possible future profitability value of products that may be purchased in the future"

For example, Appellant's attorney notes that Johnson merely describes a method of valuation of large groups of assets by partial full underwriting, partial sample underwriting and inferred values of the remainder using an iterative and adaptive statistical evaluation of all assets and statistical inferences drawn from the evaluation and applied to generate inferred values. Individual asset values are developed and listed in tables so that individual asset values can be taken and quickly grouped in any desired or prescribed manner for bidding purposes. The assets are collected into a database, divided by credit variable, subdivided by ratings as to those variables and then rated individually. The assets are then regrouped according to a bidding grouping and a collective valuation established by cumulating the individual valuations. Specifically, the portions of Johnson cited by the Office Action merely refer to establishing valuations of assets using NPV (Net Present Value), not FV (Future Value). However, nowhere do the above portions of Johnson refer to FV (Future Value) propensity rules, initial propensity rates, rate changes, effective propensity rates, or the specific steps or functions performed by Appellant's independent claims.

b. Claim limitations directed to "applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules"

With regard to the assertion that Sandretto teaches "applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules (column 8, line 60 - column 9, line 19)," Appellant's attorney notes that this limitation is not recited in the claim. Instead, the claim limitation recites "applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using

the selected amounts and rates." The cited portion of Sandretto is bolded in the paragraph reproduced below:

> Sandretto: column 8, line 60 – column 9, line 19
>
> It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; (5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates" being performed in this portion of Sandretto. "FV propensity rules" are defined at page 24, line 1 et seq. of Appellant's specification, while "FV attrition rules" are defined at page 28, line 8 et seq. of Appellant's specification. There is no discussion of an FV propensity rules or FV attrition rules in this portion of Sandretto. Instead, this portion of Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset.

c. Claim limitations directed to "applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts"

With regard to the assertion that Sandretto teaches "applying one or more FV propensity rules (risk) to the selected accounts using the selected amounts and rates (abstract & column 4, lines 13-16)," Appellant's attorney notes that this limitation is not recited in the claim. Appellant's attorney assumes the Office Action meant to refer to the limitations "applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts," instead. Appellant's attorney respectfully disagrees with the Office Action's analysis concerning Sandretto, based on the cited portions of Sandretto, which are bolded in the paragraphs reproduced below:

> Sandretto: Abstract
>
> Methods and apparatus for: (1) inputting economic variables expected to influence future asset values and asset-specific variables; (2) estimating financial statements, future asset values, and tentative asset NPVs using estimated economic variables and estimated asset-specific variables; (3) estimating different financial statements, future asset values and current asset NPVs assuming different estimates of the economic variables that affect asset values; and (4) processes to: (a) equate; or (2) reduce to acceptably small numbers the differences between: (i) the risk measures, terminal values, default premiums, and risk premiums used to determine current values, and (ii) risk measures, terminal values, default premiums, and risk premiums implied by the estimates of economic and firm-specific variables.

> Sandretto: column 4, lines 13-16
>
> In practice, many analysts do use judgment to estimate discount rates and many are highly successful investors and managers. Other analysts prefer a more objective process. The prior art development that has had by far the most significant influence on the field of finance was independently developed by William Sharpe and John Lintner in 1964 and 1965. That prior art developed a theoretical mathematical relation between an asset's risk and its return (on investment). The resulting risk-measure can be used to determine an asset's discount rate. The theoretical relation between an asset's risk and return is known in the prior art finance literature as the Sharpe-Lintner capital asset pricing model (CAPM):

There is no "matching the FV propensity rule against the selected account" being performed in these portions of Sandretto. In these portions of Sandretto, there is no matching being performed, no matched accounts, and no discussion of FV propensity rules. Instead, these

portions of Sandretto refer only to estimating future asset values and asset NPVs using different estimates of the economic variables that affect asset values, as well as the discussion of an asset's risk and its return on investment, wherein a risk measure can be used to determine an asset's discount rate.

d. Claim limitations directed to "determining an initial propensity rate for the matched accounts"

With regard to the assertion that Sandretto further discloses "determining an initial propensity rate for the matched accounts (column 4, lines 40-55)," Appellant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

> Sandretto: column 4, lines 40-55
>
> Because current methods are unable to estimate the expected value of the returns for investing either in an individual asset or in an index, in practice the CAPM is implemented using the following version of equation (1):
>
> (2) $R_{it} = R_{ft} + \beta_i \times (R_{mt} - R_{ft})$
>
> where:
>
> R.sub.it =the actual return from investing in asset i during a prior period t
>
> R.sub.mt =the actual return from investing in the market portfolio during a prior period t
>
> R.sub.ft =the actual risk-free rate during a prior period t
>
> .beta..sub.i =the slope coefficient derived by regressing R.sub.it against R.sub.mt
>
> a simplified version, sometimes referred to as the market model, is sometimes substituted for equation (2) because in practice there is little difference between the two:
>
> (3) $R_{it} = \beta_i \times R_{mt}$

There is no "determining an initial propensity rate for the matched accounts" being performed in this portion of Sandretto. Specifically, in this portion of Sandretto, there is no matching being performed, no matched accounts, and no discussion of propensity rates. Instead, this portion of Sandretto refers only to a capital asset pricing model (CAPM) using an actual return on investment for an assert and a market portfolio from a prior period.

e. Claim limitations directed to "calculating a rate change for the matched account"

With regard to the assertion that Sandretto further discloses "calculating a rate change for the matched account (column 17, line 59 - column 18, line 1)," Appellant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

> Sandretto: column 17, line 59 – column 18, line 26
> Step 130 tests whether the difference between each asset's input risk measure used to discount projected cash flows in Step 70 and that asset's output risk measure determined in Step 110 is within a predetermined acceptable range. If, in Step 130, the difference between the input risk measure and the output risk measure is greater than a predetermined amount for any asset, a new, adjusted input risk measure .beta. is determined in Step 140 for each such asset and the process returns back to Step 70 (or to Step 50 in some implementations where cash flows depend on the risk measure). However, unlike the iterative process for asset risk measures and for the risk premium, this difference cannot be reduced to an arbitrarily small amount, only to a minimum value that depends upon various input parameters and market prices for individual assets. Typically, but not in all cases, selecting a new .beta. that is between the input .beta. and the output .beta. will assure that the process will converge, as desired. If the difference between the input and output risk measures is less than a predetermined limit for each asset, Step 130 passes control to Step 150. Step 150, which is an optional, yet preferred step to the basic process, tests whether the difference between the sum of one or more estimated asset values in Step 70, and the sum of the actual market prices of those assets, is within a predetermined limit. If, in Step 150, the difference is greater than the predetermined limit, the process continues to Step 160 where a new market risk premium (E(R.sub.m)-R.sub.f) is determined. For example, if the total actual market value of the assets is greater than the total market value determined by the process, then the estimated risk premium should be increased. After the risk premiums are adjusted in Step 160, the process returns back to Step 70. When the difference between the total actual market value of the assets and the total values determined by the process are within a predetermined limit, the process continues from Step 150 to Step 162.

There is no "calculating a rate change for the matched account" being performed in this portion of Sandretto, in the context of applying FV propensity rules. Instead, this portion of Sandretto refers only to determining whether a risk measure for an asset is within a predetermined acceptable range.

f. Claim limitations directed to "calculating an effective propensity rate"

With regard to the assertion that Sandretto further discloses "calculating an effective propensity rate (column 9, lines 11-19) for each forecast period (column 10, lines 1-7) by applying the rate change to each initial propensity rate (column 4, lines 36-67 & column 10, lines 1-7) for each forecast period (column 10, lines 1-7)," Appellant's attorney disagrees. These portions of Sandretto are bolded in the paragraphs reproduced below:

Sandretto: column 4, lines 36-67

Because current methods are unable to estimate the expected value of the returns for investing either in an individual asset or in an index, in practice the CAPM is implemented using the following version of equation (1):

$$(2) R_{it} = R_{ft} + \beta_i \times (R_{mt} - R_{ft})$$

where:

R.sub.it =the actual return from investing in asset i during a prior period t

R.sub.mt =the actual return from investing in the market portfolio during a prior period t

R.sub.ft =the actual risk-free rate during a prior period t

.beta..sub.i =the slope coefficient derived by regressing R.sub.it against R.sub.mt

a simplified version, sometimes referred to as the market model, is sometimes substituted for equation (2) because in practice there is little difference between the two:

$$(3) R_{it} = \beta_i \times R_{mt}$$

From its inception this simple linear model has been the basis for what is by far the most extensive body of academic research in the field of finance, which includes thousands of academic and applied or practical articles in the fields of finance, economics, and accounting. The CAPM is also widely used in the practice of business and finance. In both academic studies and in practice, the model is often used to estimate the risk of common stocks and possibly less often to estimate the value of common stocks. Typically the statistical method of linear regression is used to estimate an asset's risk as follows:

Sandretto: column 8, line 60 - column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; (5) determine an initial discount rate for each asset using the initial input risk measure

for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

Sandretto: column 10, lines 1-7

The process begins by estimating an initial set of financial statements and cash flows for each asset (only cash flows if the asset is a bond or similar asset) for some number of periods using estimated operating, financing, accounting and economic variables an analyst has input into the process. Estimated cash flows may be also be adjusted for expected price changes, such as inflation.

There is no "calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period" being performed in these portions of Sandretto. Specifically, in these portions of Sandretto, there is no discussion of an effective propensity rate or an initial propensity rate. Instead, these portions of Sandretto refer only to calculating an actual return from investing in an individual asset as well as a market portfolio (e.g., index) during a prior period using an actual risk-free rate for the period; regressing simulated asset returns against simulated market returns to determine an output risk measure for each asset, using the resulting output risk measure to estimate a new input risk measure, until, for each asset, the output risk measure approximates to within a desired accuracy the input risk measure used to determine the most recently iterated discount rate; and estimating cash flows for each asset for some number of periods.

g. Claim limitations directed to "performing the FV propensity rule to calculate an FV amount from FV expected values"

With regard to the assertion that Sandretto further discloses "performing the FV propensity rule to calculate an FV amount from FV expected values (abstract & column 4, lines 13-16) and the effective propensity rates (column 8, line 60 - column 9, line 19) for each forecast

period (column 10, lines 1-7)," Appellant's attorney disagrees. These portions of Sandretto are bolded in the paragraphs reproduced below:

Sandretto: Abstract

Methods and apparatus for: (1) inputting economic variables expected to influence future asset values and asset-specific variables; (2) estimating financial statements, future asset values, and tentative asset NPVs using estimated economic variables and estimated asset-specific variables; (3) estimating different financial statements, future asset values and current asset NPVs assuming different estimates of the economic variables that affect asset values; and (4) processes to: (a) equate; or (2) reduce to acceptably small numbers the differences between: (i) the risk measures, terminal values, default premiums, and risk premiums used to determine current values, and (ii) risk measures, terminal values, default premiums, and risk premiums implied by the estimates of economic and firm-specific variables.

Sandretto: column 4, lines 13-16

In practice, many analysts do use judgment to estimate discount rates and many are highly successful investors and managers. Other analysts prefer a more objective process. The prior art development that has had by far the most significant influence on the field of finance was independently developed by William Sharpe and John Lintner in 1964 and 1965. That prior art developed a theoretical mathematical relation between an asset's risk and its return (on investment). The resulting risk-measure can be used to determine an asset's discount rate. The theoretical relation between an asset's risk and return is known in the prior art finance literature as the Sharpe-Lintner capital asset pricing model (CAPM):

Sandretto: column 8, line 60 – column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; (5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use

the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

Sandretto: column 10, lines 1-7

The process begins by estimating an initial set of financial statements and cash flows for each asset (only cash flows if the asset is a bond or similar asset) for some number of periods using estimated operating, financing, accounting and economic variables an analyst has input into the process. Estimated cash flows may be also be adjusted for expected price changes, such as inflation.

There is no "performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period" being performed in these portions of Sandretto. Specifically, in these portions of Sandretto, there is no discussion of FV propensity rules or FV expected values or effective propensity rates. Instead, these portions of Sandretto refer only to estimating future asset values and asset NPVs using different estimates of economic variables that affect asset values, including risk measures; the mathematical relation between an asset's risk and its return on investment which results in a risk-measure that can be used to determine an asset's discount rate; regressing simulated asset returns against simulated market returns to determine an output risk measure for each asset, using the resulting output risk measure to estimate a new input risk measure, until, for each asset, the output risk measure approximates to within a desired accuracy the input risk measure used to determine the most recently iterated discount rate; and estimating cash flows for each asset for some number of periods.

h. Claim limitations directed to "the NPV forecast rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods"

With regard to the assertion that Kuhlemeyer teaches "the NPV forecast rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with

compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods," Appellant's attorney disagrees. Kuhlemeyer does not specifically describe the categories of distinctly different FV propensity rules listed in independent claims 1, 19 and 37. Instead, Kuhlemeyer merely describes the use of different cash flows in different forecast periods. However, the different cash flows of Kuhlemeyer merely comprise examples of specific amounts, and do not comprise Appellant's FV propensity rules.

i. Claim limitations directed to "selecting in one or more computers accounts, amounts and rates from account data"

With regard to the assertion that Keyes discloses "selecting in one or more computers accounts, amounts and rates from account data and generating cash flow and net present value based on received cash flow information, expenses and timings (Figures 6, 9 & 11), Appellant's attorney notes that the limitation "generating cash flow and net present value based on received cash flow information, expenses and timings" is not recited in the independent claims.. Also, whether Keyes also teaches "providing different scenarios based on a variety of assumptions taking into account a variety of foreseeable risks (columns 2-3)," Appellant's attorney notes that these assertions are not related to any of Appellant's claim limitations. Indeed, Appellant's attorney submits that Keyes fails to overcome these deficiencies of Johnson, Sandretto and Kuhlemeyer, and merely discloses that selected amounts are forecast amounts.

j. Summary

Consequently, the various elements of Appellant's claimed invention together provide operational advantages over Johnson, Sandretto, Kuhlemeyer and Keyes. In addition, Appellant's invention solves problems not recognized by Johnson, Sandretto, Kuhlemeyer and Keyes.

Thus, Appellant's attorney submits that independent claims 1, 19, and 37 are allowable over Johnson, Sandretto, Kuhlemeyer and Keyes. Further, dependent claims 3-9, 11-18, 21-27, 29-36, 39-45 and 47-54 are submitted to be allowable over Johnson, Sandretto, Kuhlemeyer and Keyes in the same manner, because they are dependent on independent claims 1, 19, and 37, respectively, and thus contain all the limitations of the independent claims.

2. Dependent claims 3, 21 and 39

With regard to dependent claims 3, 21 and 39, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the FV is a possible future profitability value," these claims stand or fall with claims 1, 19 and 37, respectively.

3. Dependent claims 4, 22 and 40

With regard to dependent claims 4, 22 and 40, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the selected accounts contain current profitability values," these claims stand or fall with claims 1, 19 and 37, respectively.

4. Dependent claims 5, 23 and 41

With regard to dependent claims 5, 23 and 41, which are dependent on claims 4, 22 and 40, respectively, and which recite that "the current profitability data is aggregated to provide an initial amount for the FV calculations," these claims stand or fall with claims 4, 22 and 40, respectively.

5. Dependent claims 7, 25 and 43

With regard to dependent claims 7, 25 and 43, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the selected rates are FV propensity rates," these claims stand or fall with claims 1, 19 and 37, respectively.

6. Dependent claims 8, 26 and 44

With regard to dependent claims 8, 26 and 44, which are dependent on claims 1, 19 and 37, respectively, and which recite that "a user specifies one or more forecast periods over which the FV calculations are performed," these claims stand or fall with claims 1, 19 and 37, respectively.

7. Dependent claims 9, 27 and 45

With regard to dependent claims 9, 27 and 45, which are dependent on claims 8, 26 and 45, respectively, and which recite that "a user specifies one or more rates for the forecast periods," these claims stand or fall with claims 8, 26 and 45, respectively.

8. Dependent claims 11, 29 and 47

With regard to dependent claims 11, 29 and 47, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the FV propensity rule comprises a Constant (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_0) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_0 = initial rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period,"

the Office Action asserts that Johnson discloses "calculating the time value of money (column 12, lines 34-36)," and that Kuhlemeyer teaches this specific FV propensity rule. Appellant's attorney disagrees. Kuhlemeyer does not specifically describe this particular FV propensity rule, and more specifically, this specific calculation.

9. Dependent claims 12, 30 and 48

With regard to dependent claims 12, 30 and 48, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the FV propensity rule comprises a Constant (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_m)^i * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_m = monthly rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period,"

the Office Action asserts that Johnson discloses "calculating the time value of money (column 12, lines 34-36)," and that Kuhlemeyer teaches this specific FV propensity rule. Appellant's attorney disagrees. Kuhlemeyer does not specifically describe this particular FV propensity rule, and more specifically, this specific calculation.

10. Dependent claims 13, 31 and 49

With regard to dependent claims 13, 31 and 49, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the FV propensity rule comprises an Additive (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_0 = initial rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period,"

the Office Action asserts that Johnson discloses "calculating the time value of money (column 12, lines 34-36)," and that Kuhlemeyer teaches this specific FV propensity rule. Appellant's attorney disagrees. Kuhlemeyer does not specifically describe this particular FV propensity rule, and more specifically, this specific calculation.

11. Dependent claims 14, 32 and 50

With regard to dependent claims 14, 32 and 50, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the FV propensity rule comprises an Additive (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

$Compounded\_Rate = Rate_1 * Rate_2 * ... * Rate_I$,"

the Office Action asserts that Johnson discloses "calculating the time value of money (column 12, lines 34-36)," and that Kuhlemeyer teaches this specific FV propensity rule. Appellant's attorney disagrees. Kuhlemeyer does not specifically describe this particular FV propensity rule, and more specifically, this specific calculation.

12. Dependent claims 15, 33 and 51

With regard to dependent claims 15, 33 and 51, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the FV propensity rule comprises a Manual (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_{man}) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_{man} = manual rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period,"

the Office Action asserts that Johnson discloses "calculating the time value of money (column 12, lines 34-36)," and that Kuhlemeyer teaches this specific FV propensity rule. Appellant's attorney disagrees. Kuhlemeyer does not specifically describe this particular FV propensity rule, and more specifically, this specific calculation.

13. Dependent claims 16, 34 and 52

With regard to dependent claims 16, 34 and 52, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the FV propensity rule comprises a Manual (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

$Compounded\_Rate = Rate_1 * Rate_2 * ... * Rate_I$,"

the Office Action asserts that Johnson discloses "calculating the time value of money (column 12, lines 34-36)," and that Kuhlemeyer teaches this specific FV propensity rule. Appellant's attorney disagrees. Kuhlemeyer does not specifically describe this particular FV propensity rule, and more specifically, this specific calculation.

14. Dependent claims 17, 35 and 53

With regard to dependent claims 17, 35 and 53, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the FV propensity rule comprises a Constant method according to:

$$Amount_i = Amount_0$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount, and

i = forecast period,"

the Office Action asserts that Johnson discloses "calculating the time value of money (column 12, lines 34-36)," and that Kuhlemeyer teaches this specific FV propensity rule. Appellant's attorney disagrees. Kuhlemeyer does not specifically describe this particular FV propensity rule, and more specifically, this specific calculation.

B. Arguments directed to the second grounds for rejection: Claims 6, 24 and 42 stand rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Johnson et al., U.S. Patent 7,082,411 (Johnson), Sandretto, U.S. Patent 5,812,988 (Sandretto), Kuhlemeyer, "Fundamentals of Financial Management" (Kuhlemeyer), Keyes et al., U.S. Patent 7,447,652 (Keyes), and Atkins, U.S. Patent 5,852,811 (Atkins).

1. Dependent claims 6, 24 and 42

With regard to dependent claims 6, 24 and 42, which are dependent on claims 1, 19 and 37, respectively, and which recite that "the selected amounts are forecast amounts," these claims stand or fall with claims 1, 19 and 37, respectively.

VIII. CONCLUSION

In light of the above arguments, Appellant's attorney respectfully submits that the cited reference does not anticipate nor render obvious the claimed invention. More specifically, Appellant's claims recite novel physical features which patentably distinguish over the cited reference under 35 U.S.C. §§ 102 and 103.

As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

Respectfully submitted,

GATES & COOPER LLP
Attorneys for Appellant

Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045
(310) 641-8797

Date: January 12, 2010

By: /George H. Gates/
Name: George H. Gates
Reg. No.: 33,500

GHG/

CLAIMS APPENDIX

1. (PREVIOUSLY PRESENTED) A method of performing financial processing, comprising:

(a) selecting, in one or more computers, accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and

(b) performing, in one or more computers, one or more Future Value (FV) calculations on the selected accounts by applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates, wherein the FV calculations determine a possible future profitability value of products that may be purchased in the future;

(c) wherein the step of applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts; determining an initial propensity rate for the matched accounts; calculating a rate change for the matched account; calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period; performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period; and storing the FV amount; and

(d) wherein the FV propensity rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.

2. (CANCELED)

3. (ORIGINAL) The method of claim 1, wherein the FV is a possible future profitability value.

4. (ORIGINAL) The method of claim 1, wherein the selected accounts contain current profitability values.

5. (ORIGINAL) The method of claim 4, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.

6. (ORIGINAL) The method of claim 1, wherein the selected amounts are forecast amounts.

7. (ORIGINAL) The method of claim 1, wherein the selected rates are FV propensity rates.

8. (ORIGINAL) The method of claim 1, wherein a user specifies one or more forecast periods over which the FV calculations are performed.

9. (ORIGINAL) The method of claim 8, wherein a user specifies one or more rates for the forecast periods.

10. (CANCELED)

11. (ORIGINAL) The method of claim 1, wherein the FV propensity rule comprises a Constant (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_0) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount,
R_0 = initial rate,
i = forecast period,
j = first month in a forecast period, and
k = last month in a forecast period.

12. (ORIGINAL) The method of claim 1, wherein the FV propensity rule comprises a Constant (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_m)^i * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_m = monthly rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

13. (ORIGINAL) The method of claim 1, wherein the FV propensity rule comprises an Additive (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_0 = initial rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

14. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the FV propensity rule comprises an Additive (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

Compounded_Rate = $Rate_1$ * $Rate_2$ * ... * $Rate_i$.

15. (ORIGINAL) The method of claim 1, wherein the FV propensity rule comprises a Manual (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_{man}) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_{man} = manual rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

16. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the FV propensity rule comprises a Manual (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

Compounded_Rate = $Rate_1$ * $Rate_2$ * ... * $Rate_i$.

17. (ORIGINAL) The method of claim 1, wherein the FV propensity rule comprises a Constant method according to:

$$Amount_i = Amount_0$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount, and
i = forecast period.

18. (ORIGINAL) The method of claim 1, wherein the FV propensity rule comprises a Negative Compounding method according to:

$$Amount_i = \text{Initial Forecast Amount} * (\text{Attrition Rate} * (1 - \text{Attrition Rate})^n)$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount,
i = forecast period, and
n = amortization term.

19. (PREVIOUSLY PRESENTED) A system for performing financial processing, comprising:

one or more computers;

logic, performed by the computers, for:

(a) selecting accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and

(b) performing one or more Future Value (FV) calculations on the selected accounts by applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates, wherein the FV calculations determine a possible future profitability value of products that may be purchased in the future;

(c) wherein the step of applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts; determining an initial propensity rate for the matched accounts; calculating a rate change for the matched account; calculating an effective propensity rate for each forecast period by applying the rate change to each

initial propensity rate for each forecast period; performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period; and storing the FV amount; and

(d) wherein the FV propensity rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.

20. (CANCELED)

21. (ORIGINAL) The system of claim 19, wherein the FV is a possible future profitability value.

22. (ORIGINAL) The system of claim 19, wherein the selected accounts contain current profitability values.

23. (ORIGINAL) The system of claim 22, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.

24. (ORIGINAL) The system of claim 19, wherein the selected amounts are forecast amounts.

25. (ORIGINAL) The system of claim 19, wherein the selected rates are FV propensity rates.

26. (ORIGINAL) The system of claim 19, wherein a user specifies one or more forecast periods over which the FV calculations are performed.

27. (ORIGINAL) The system of claim 26, wherein a user specifies one or more rates for the forecast periods.

28. (CANCELED)

29. (ORIGINAL) The system of claim 19, wherein the FV propensity rule comprises a Constant (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_0) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount,
R_0 = initial rate,
i = forecast period,
j = first month in a forecast period, and
k = last month in a forecast period.

30. (ORIGINAL) The system of claim 19, wherein the FV propensity rule comprises a Constant (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_m)^i * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount,
R_m = monthly rate,
i = forecast period,
j = first month in a forecast period, and
k = last month in a forecast period.

31. (ORIGINAL) The system of claim 19, wherein the FV propensity rule comprises an Additive (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_0 = initial rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

32. (PREVIOUSLY PRESENTED) The system of claim 19, wherein the FV propensity rule comprises an Additive (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

$Compounded\_Rate = Rate_1 * Rate_2 * ... * Rate_i$.

33. (ORIGINAL) The system of claim 19, wherein the FV propensity rule comprises a Manual (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_{man}) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_{man} = manual rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

34. (PREVIOUSLY PRESENTED) The system of claim 19, wherein the FV propensity rule comprises a Manual (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount,
i = forecast period,
j = first month in a forecast period,
k = last month in a forecast period, and
$Compounded\_Rate = Rate_1 * Rate_2 * ... * Rate_i$.

35. (ORIGINAL) The system of claim 19, wherein the FV propensity rule comprises a Constant method according to:

$$Amount_i = Amount_0$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount, and
i = forecast period.

36. (ORIGINAL) The system of claim 19, wherein the FV propensity rule comprises a Negative Compounding method according to:

$$Amount_i = \text{Initial Forecast Amount} * (\text{Attrition Rate} * (1 - \text{Attrition Rate})^n)$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount,
i = forecast period, and
n = amortization term.

37. (PREVIOUSLY PRESENTED) An article of manufacture comprising a storage device for storing instructions that, when read and executed by one or more computers, result in the computers performing a method of financial processing, comprising:

(a) selecting, in one or more computers, accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and

(b) performing, in one or more computers, one or more Future Value (FV) calculations on the selected accounts by applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates, wherein the FV calculations determine a possible future profitability value of products that may be purchased in the future;

(c) wherein the step of applying the FV propensity rules comprises matching the FV propensity rule against the selected accounts; determining an initial propensity rate for the matched accounts; calculating a rate change for the matched account; calculating an effective propensity rate for each forecast period by applying the rate change to each initial propensity rate for each forecast period; performing the FV propensity rule to calculate an FV amount from FV expected values and the effective propensity rates for each forecast period; and storing the FV amount; and

(d) wherein the FV propensity rule is selected from a plurality of methods comprising Constant (no compounding), Constant (with compounding), Additive (no compounding), Additive (with compounding), Manual (no compounding), Manual (with compounding), Constant and Negative Compounding methods.

38. (CANCELED)

39. (ORIGINAL) The article of claim 37, wherein the FV is a possible future profitability value.

40. (ORIGINAL) The article of claim 37, wherein the selected accounts contain current profitability values.

41. (ORIGINAL) The article of claim 40, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.

42. (ORIGINAL) The article of claim 37, wherein the selected amounts are forecast amounts.

43. (ORIGINAL) The article of claim 37, wherein the selected rates are FV propensity rates.

44. (ORIGINAL) The article of claim 37, wherein a user specifies one or more forecast periods over which the FV calculations are performed.

45. (ORIGINAL) The article of claim 44, wherein a user specifies one or more rates for the forecast periods.

46. (CANCELED)

47. (ORIGINAL) The article of claim 37, wherein the FV propensity rule comprises a Constant (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_0) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,
$Amount_0$ = initial amount,
R_0 = initial rate,
i = forecast period,
j = first month in a forecast period, and
k = last month in a forecast period.

48. (ORIGINAL) The article of claim 37, wherein the FV propensity rule comprises a Constant (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_m)^i * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_m = monthly rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

49. (ORIGINAL) The article of claim 37, wherein the FV propensity rule comprises an Additive (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_0 = initial rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

50. (PREVIOUSLY PRESENTED) The article of claim 37, wherein the FV propensity rule comprises an Additive (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

Compounded_Rate = $Rate_1$ * $Rate_2$ * ... * $Rate_i$.

51. (ORIGINAL) The article of claim 37, wherein the FV propensity rule comprises a Manual (no compounding) method according to:

$$Amount_i = Amount_0 * (1 + R_{man}) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

R_{man} = manual rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

52. (PREVIOUSLY PRESENTED) The article of claim 37, wherein the FV propensity rule comprises a Manual (with compounding) method according to:

$$Amount_i = Amount_0 * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

Compounded_Rate = $Rate_1$ * $Rate_2$ * ... * $Rate_i$.

53. (ORIGINAL) The article of claim 37, wherein the FV propensity rule comprises a Constant method according to:

$Amount_i = Amount_0$

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount, and

i = forecast period.

54. (ORIGINAL) The article of claim 37, wherein the FV propensity rule comprises a Negative Compounding method according to:

$Amount_i$ = Initial Forecast Amount * (Attrition Rate * (1 - Attrition Rate)^n)

$Amount_i$ = calculated amount by forecast period,

$Amount_0$ = initial amount,

i = forecast period, and

n = amortization term.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.